

one track portion having a cross-sectional area that is less than said predetermined cross-sectional area, said first and second sensor assemblies being mounted on said track portion.

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C, 26. (New) A system according to claim 25 wherein said inboard and outboard track assemblies each include a forward end and a rearward end with a central portion extending between said ends, said ends being mounted to the vehicle structure such that said central portions are unsupported forming a gap between the vehicle structure and the track assemblies.

27. (New) A system according to claim 26 wherein said track portion with said cross-sectional area that is less than said predetermined cross-sectional area, is located in said central portion.

28. (New) A system according to claim 26 wherein said at least one track portion of each of said track assemblies is comprised of a first track portion located forwardly in said central portion and a second track portion located rearwardly in said central portion and wherein said first and second sensor assemblies each include a first sensor mounted on said first track portion and a second sensor mounted on said second track portion.

29. (New) A system according to claim 26 including an airbag control module in communication with said processor wherein deployment force of an airbag is controlled by said control module based on seat occupant weight.

30. (New) A system according to claim 24 wherein said outboard track assembly comprises a third track mountable to the vehicle structure and a fourth track mounted for

movement relative to said second track and wherein said first sensor assembly is mounted to said first track and said second sensor assembly is mounted to said third track.

31. (New) A method for determining weight of a seat occupant comprising the steps of:

providing a first track mounted to a vehicle structure and a second track supported for movement relative to the first track to form a first track assembly

mounting a first sensor assembly to the first track assembly;

generating a first signal from the first sensor assembly in response to deflection of the first track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat; and

determining seat occupant weight based on said first signal.

32. (New) A method according to claim 31 further including the steps of providing a second track assembly spaced apart from the first track assembly with the second track assembly including a third track mounted to the vehicle structure and a fourth track supported for movement relative to the third track;

mounting a second sensor assembly to the second track assembly;

generating a second signal from the second sensor assembly in response to deflection of the second track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat; and

combining the first and second signals to determine seat occupant weight.

33. (New) A method according to claim 32 wherein the first and second track assemblies are defined by a predetermined cross-sectional area and each track assembly has at

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least one track segment with a cross-sectional area that is less than the predetermined cross-sectional area and further including the steps of mounting the first sensor assembly in the track segment of the first track assembly and mounting the second sensor assembly in the track segment of the second track assembly.

34. (New) A method according to claim 33 including the step of providing a system controller for controlling deployment of an airbag; generating a seat occupant weight signal based on the combination of the first and second signals; transmitting the seat occupant weight signal to the controller; and controlling a deployment force of the airbag based on the seat occupant weight.

35. (New) A method according to claim 33 including the steps of providing the first and second track assemblies with forward ends and rearward ends interconnected by a center portion and fixing the forward and rearward ends to the vehicle structure such that the center portion of each track assembly remains unsupported.

36. (New) A method according to claim 35 including the step of locating the track segment in the center portion.

37. (New) A method according to claim 33 wherein the first sensor assembly is comprised of a first sensor mounted rearwardly within the first track assembly and a second sensor mounted forwardly within the first track assembly and wherein the second sensor assembly is comprised of a third sensor mounted rearwardly within the second track assembly and a fourth sensor mounted forwardly within the second track assembly.

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38. (New) A method according to claim 33 including the steps of mounting the first sensor assembly to the first track of the first track assembly and mounting the second sensor assembly to the third track of the second track assembly.
